

FIG. 1

T02050* 892T5860

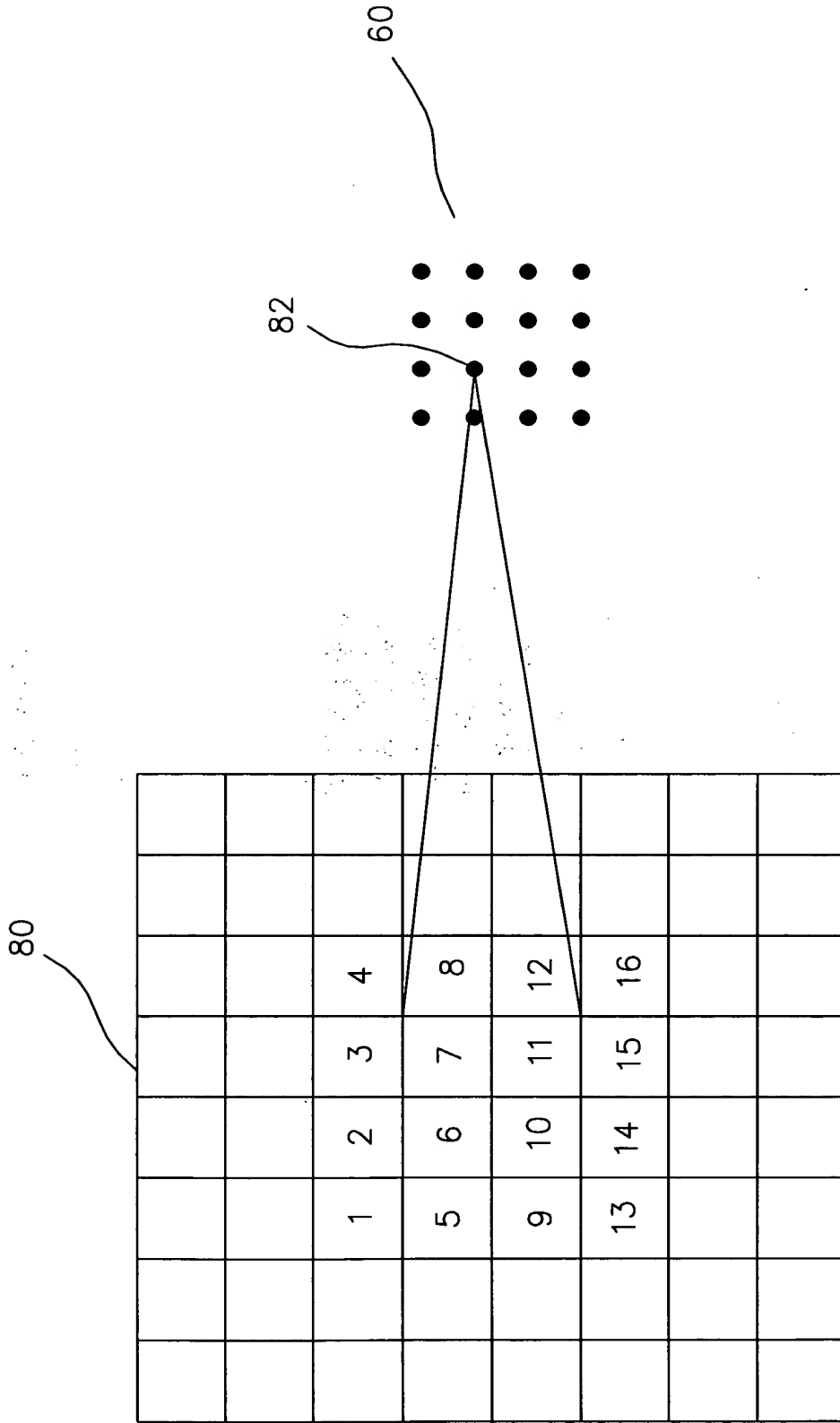


FIG. 2

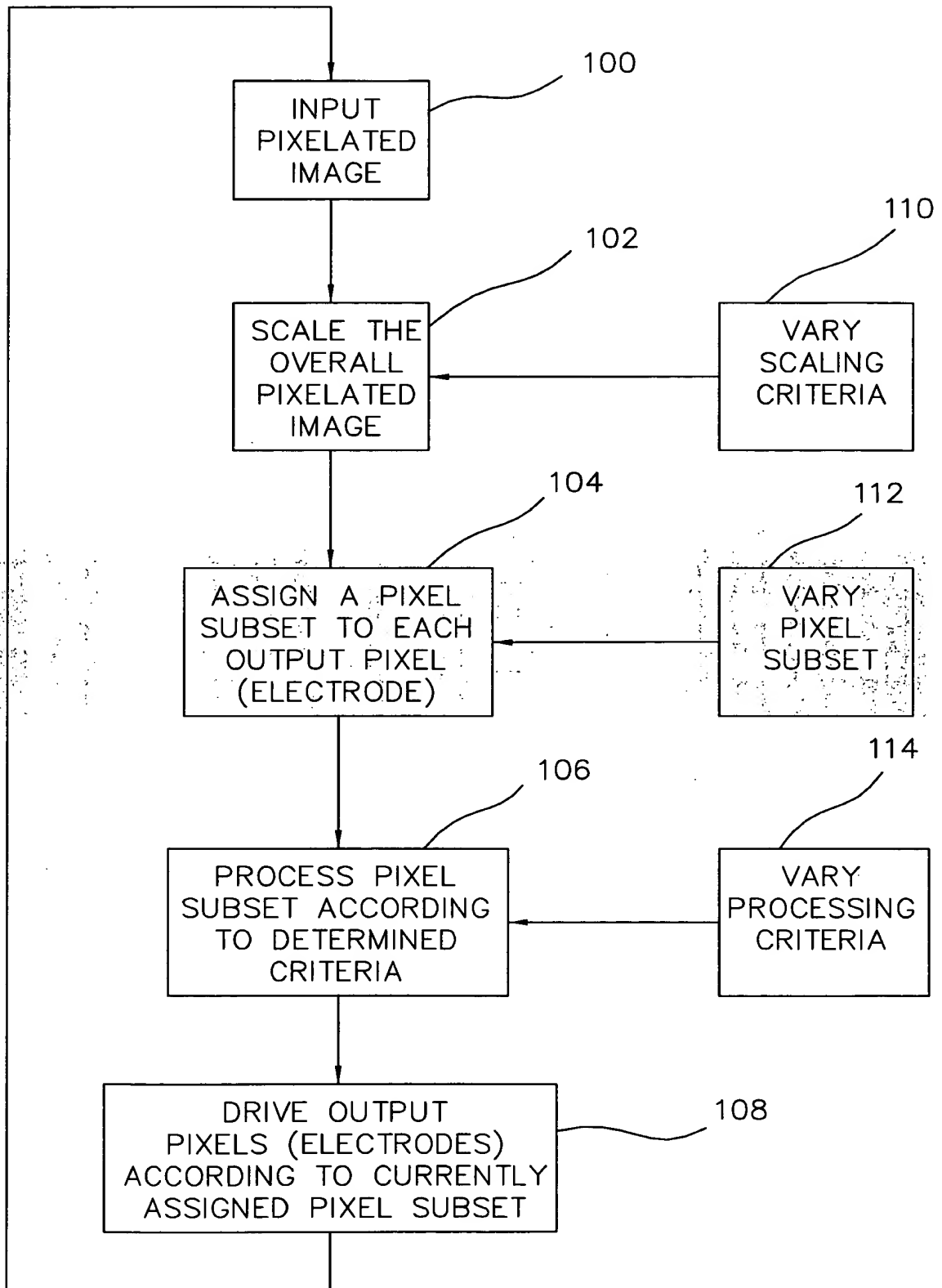
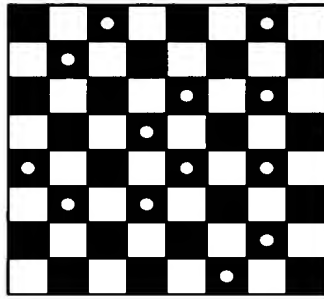


FIG. 3

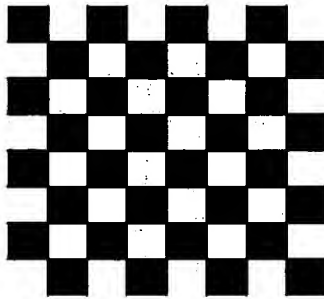
FIG. 4

WITHOUT
ENHANCED
ACUITY FILTER

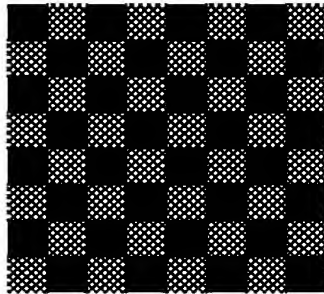


ORIGINAL
IMAGE

4A) ALIGNED



4B) 25%
MISALIGNED



4C) 50%
MISALIGNED

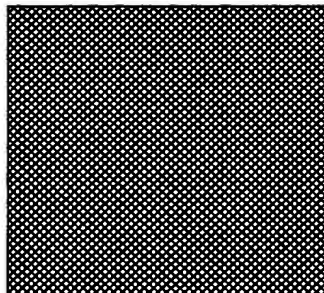
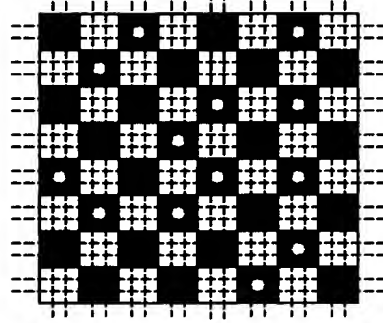


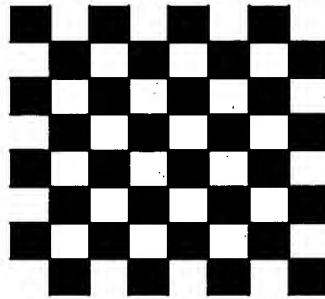
FIG. 5

WITH
ENHANCED
ACUITY FILTER

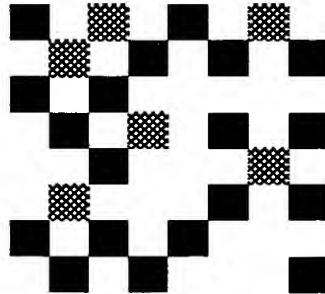


ORIGINAL
IMAGE

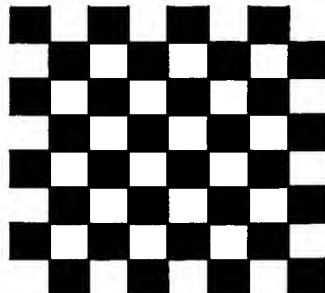
5A) ONLY
TOP CORNER



5B) ONLY
CENTER



5C) ONLY
BOTTOM



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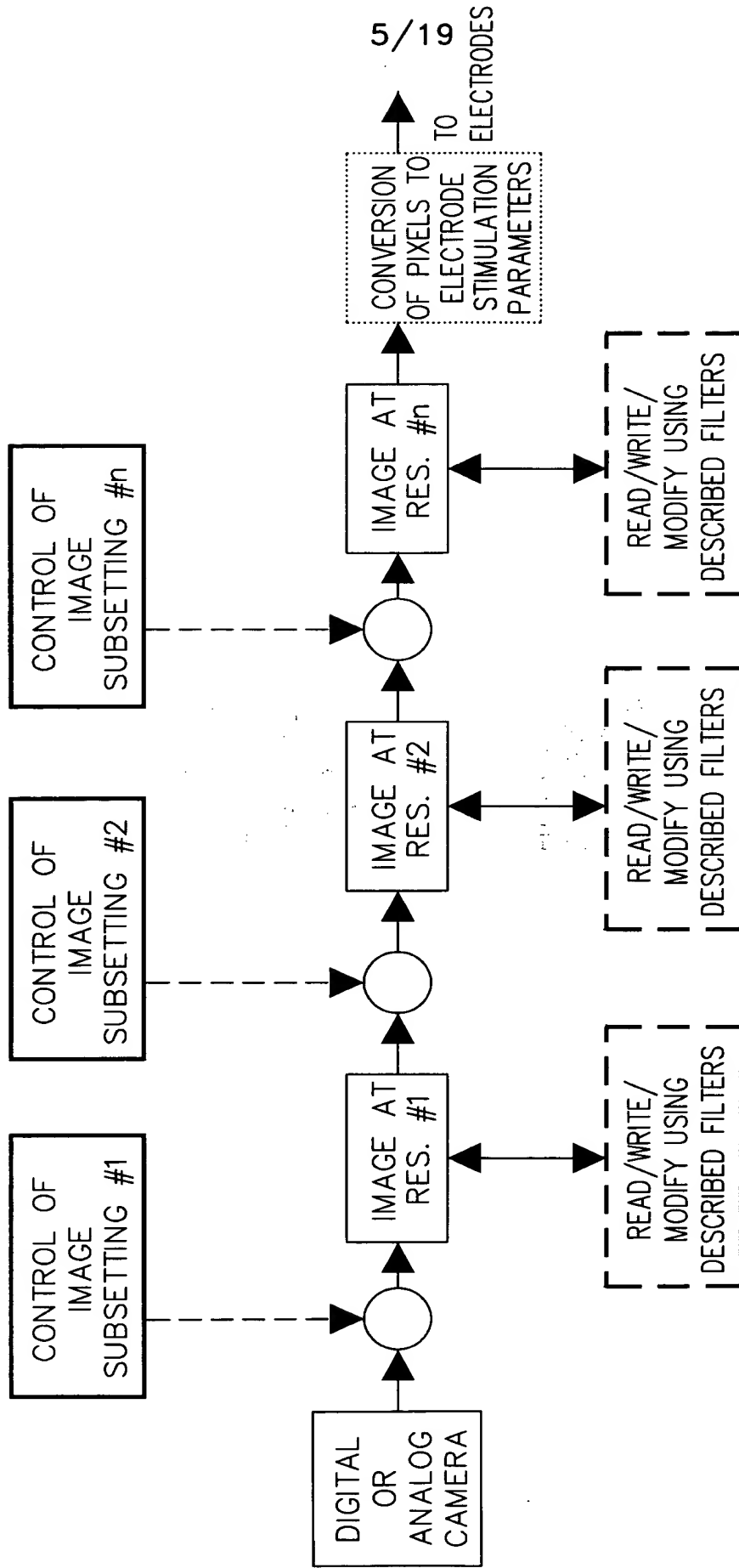


FIG. 6

CALCULATE
HISTOGRAM
OF IMAGE

TO FIG. 7B

DEFINE ARRAY
 $Ho[G]$. G IS THE
NUMBER OF LIGHT
INTENSITIES

IMAGE $Io(m,n)$,
 $0 < m < M$, $0 < n < N$

$g = 0$

Is $g < G$?

$g = g + 1$

Set $Ho[g] = 0$

Set $m = 0$

Is $m < M$?

Set $n = 0$

Is $n < N$?

$n = n + 1$

$Ho[Io(m,n)] = Ho[Io(m,n)] + 1$

$m = m + 1$

END

FIG. 7A

FROM FIG. 7A

CALCULATE
DESIRED
HISTOGRAM

TO FIG. 7C

DEFINE ARRAY
 $H_d[G]$. G IS THE
NUMBER OF LIGHT
INTENSITIES

IMAGE $I_d(m,n)$,
 $0 < m < M$, $0 < n < N$

$g = 0$

Is $g < G$?

$g = g + 1$

Set $H_d[g] = 0$

Set $m = 0$

Is $m < M$?

Set $n = 0$

Is $n < N$?

$n = n + 1$

$H_d[I_d(m,n)] = H -$
 $[I_d(m,n)] + 1$

$m = m + 1$

END

FIG. 7B

FROM FIG. 7B

CALCULATE MAP
OF HISTOGRAM
FROM ORIGINAL
TO DESIRED

TO FIG. 7E

DEFINE $M[G]$. G
IS THE NUMBER
OF
LIGHT INTENSITIES

 $g = 0$ Is $g < G$? $g = g + 1$ Set $M[g] = 0$ $Id = 0, T = 0$ $Io = 0, S = 0$ $T = T + T(Id)$

TO FIG. 7D

FIG. 7C

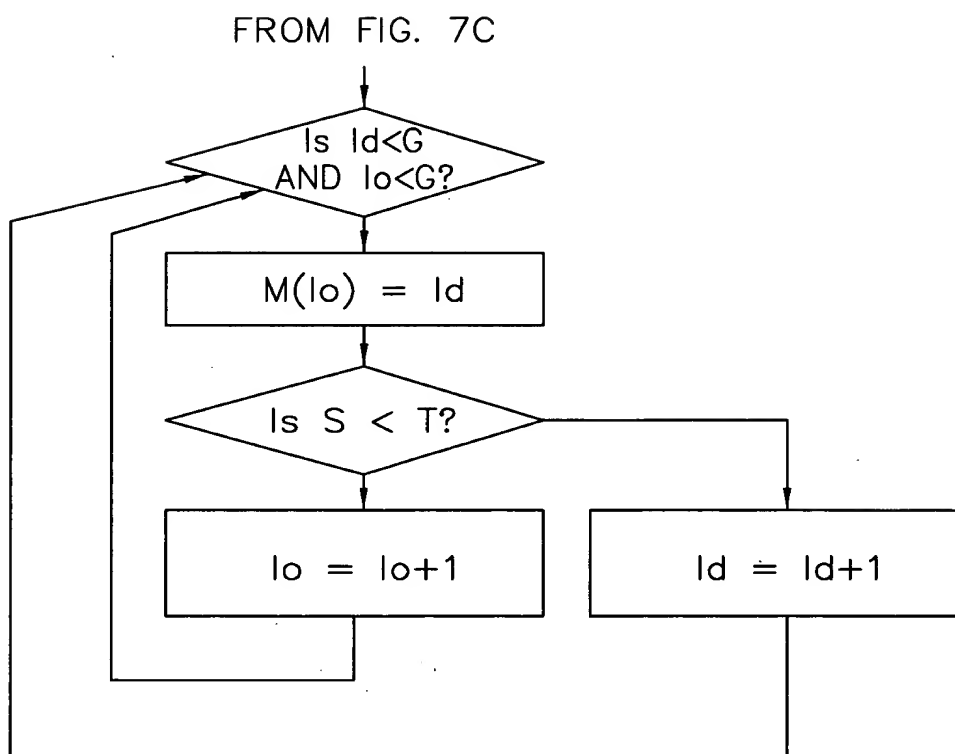


FIG. 7D

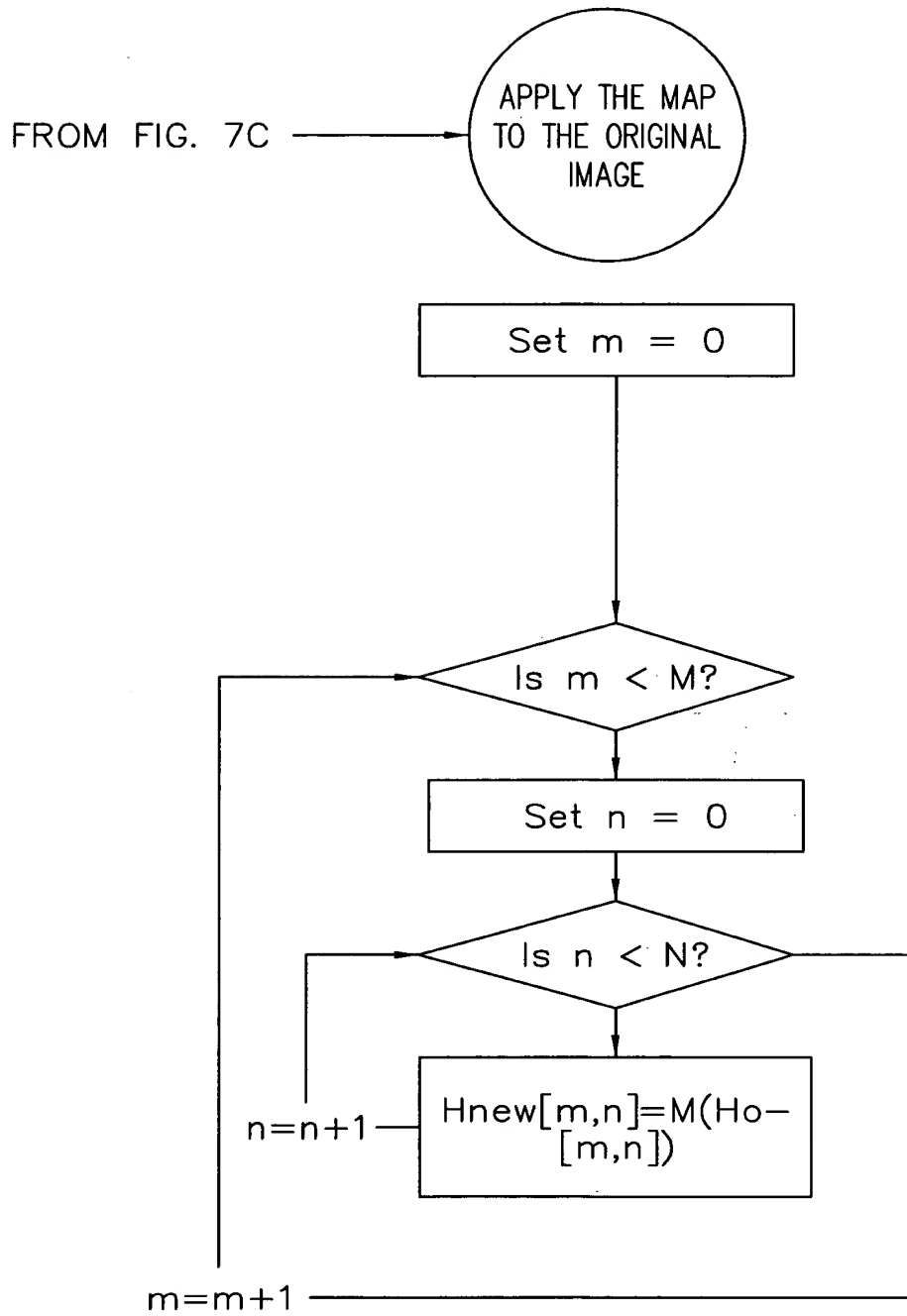


FIG. 7E

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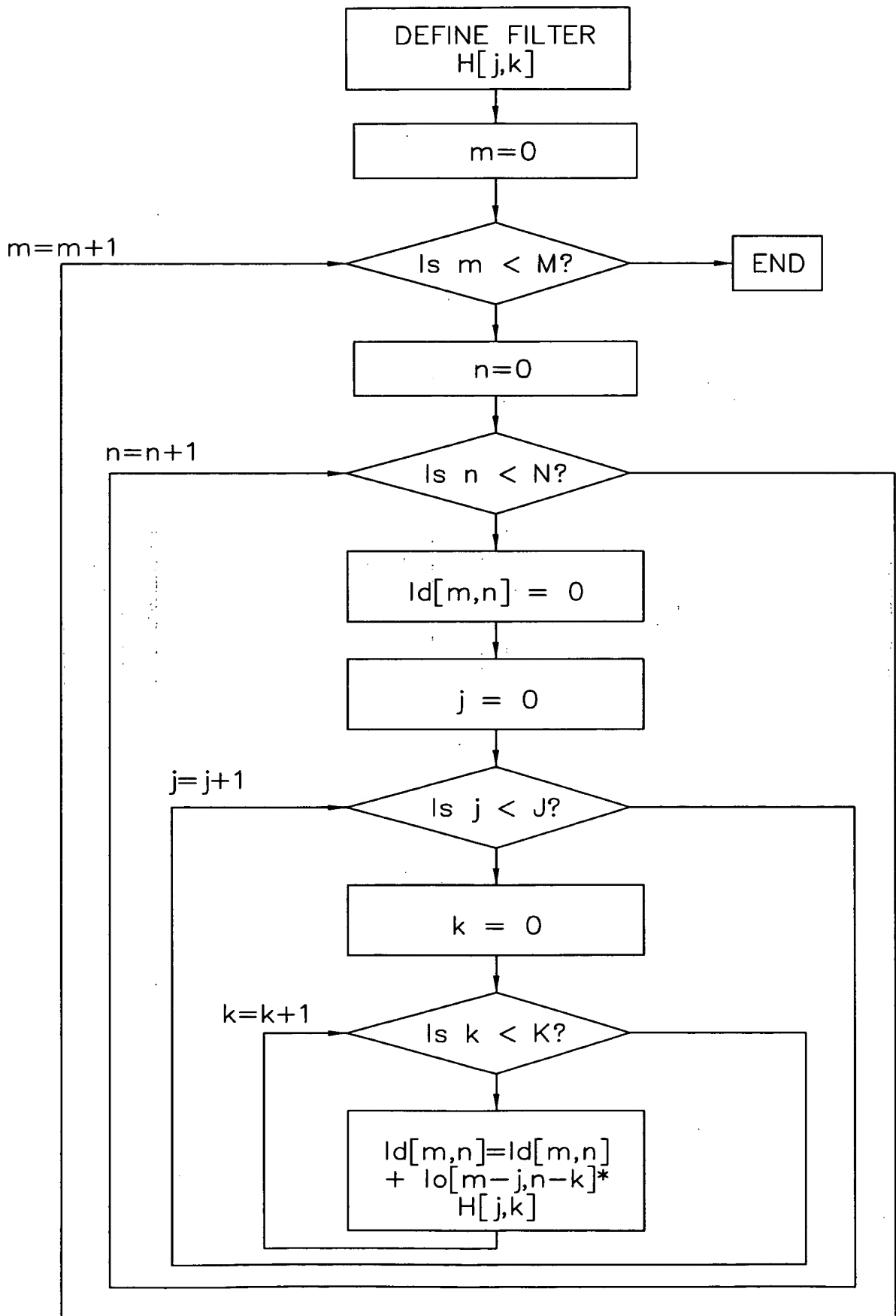


FIG. 8

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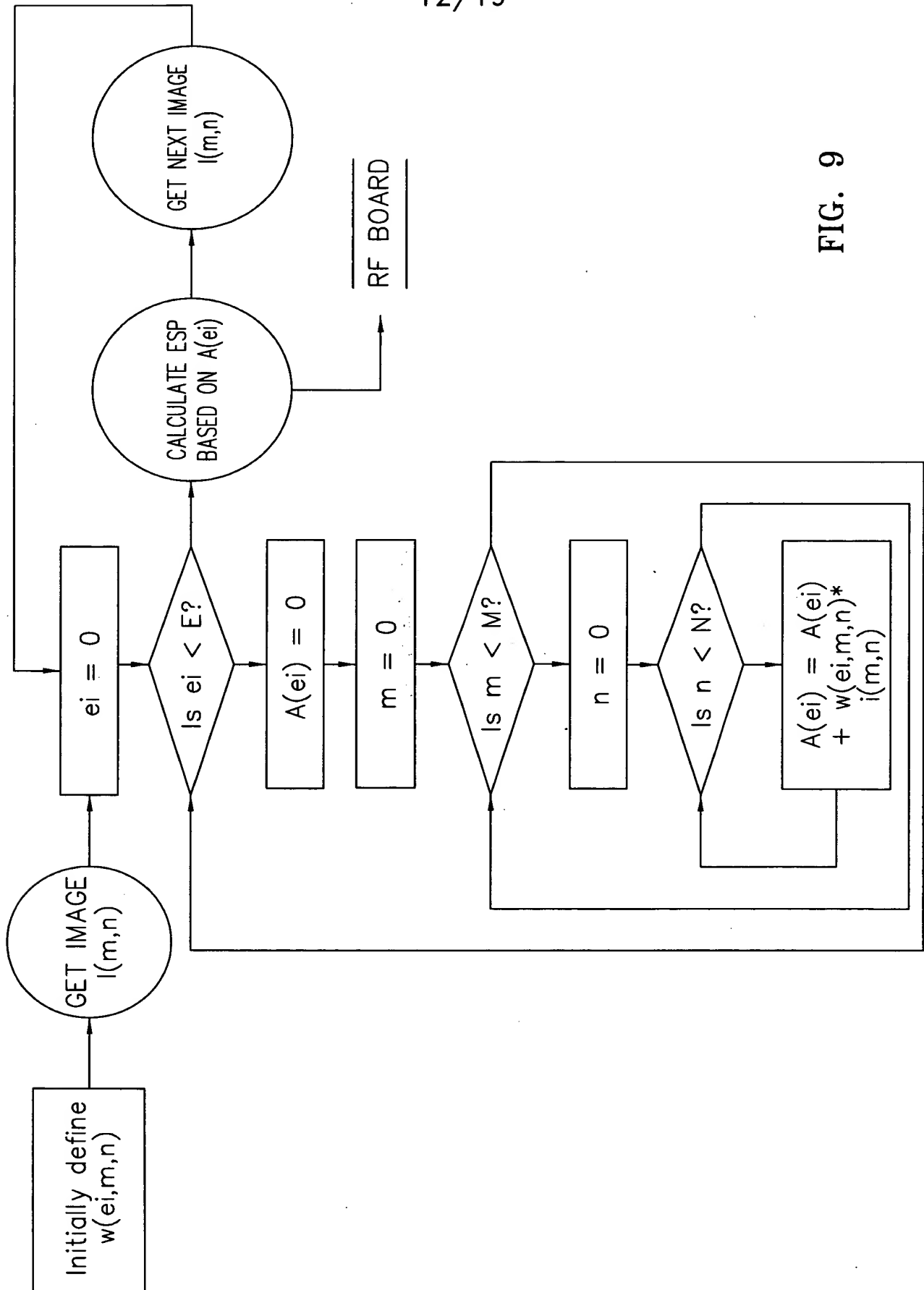


FIG. 9

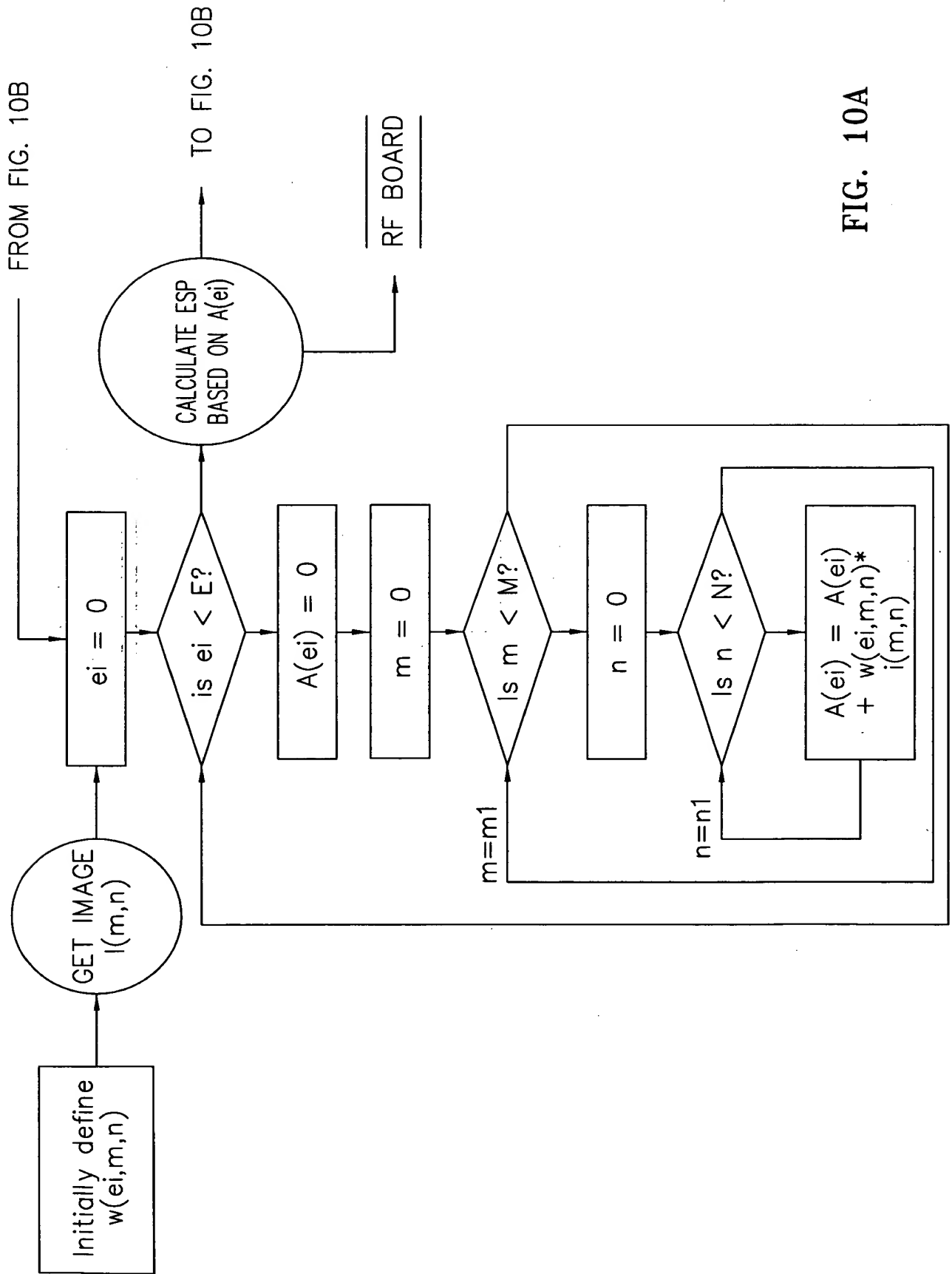


FIG. 10A

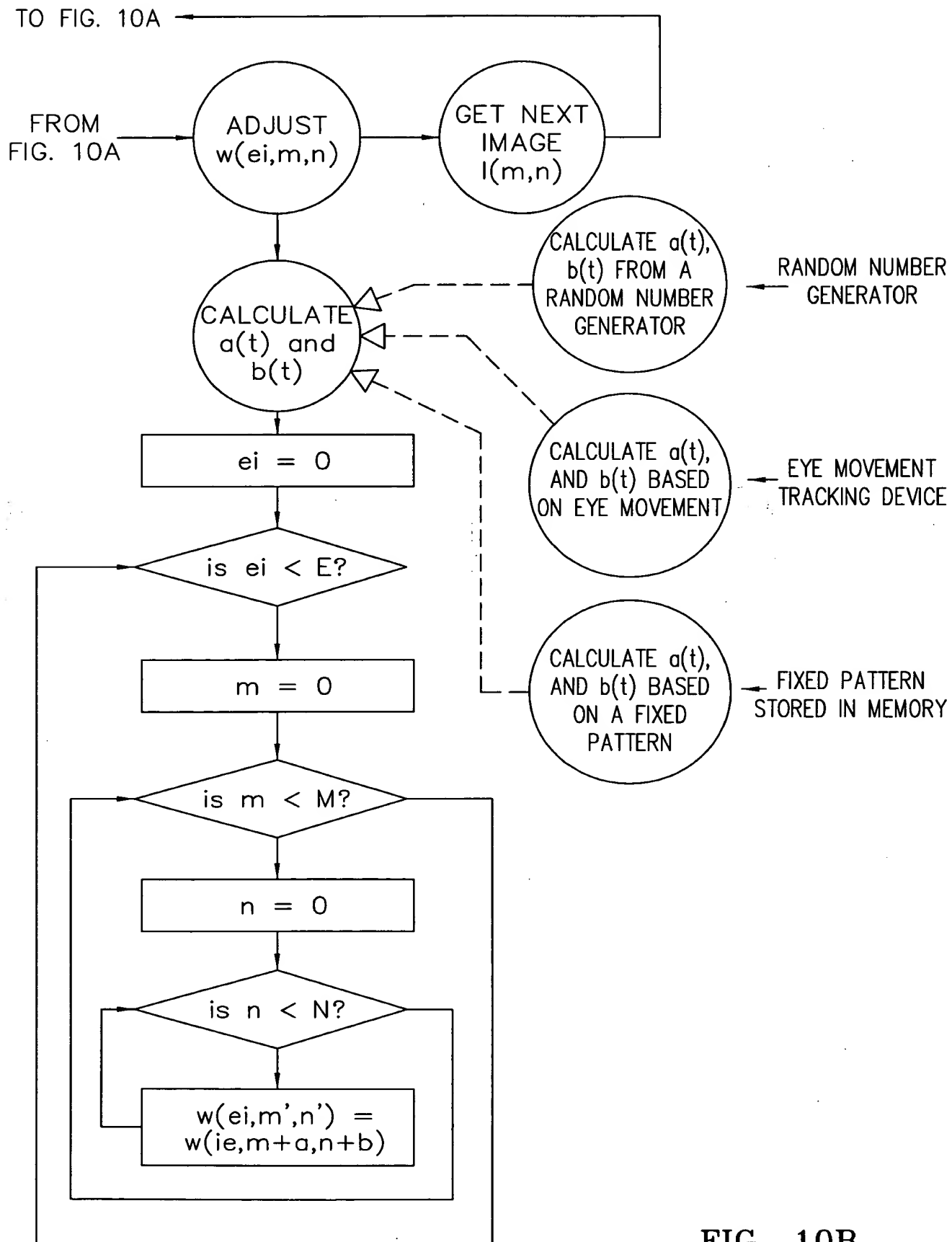


FIG. 10B

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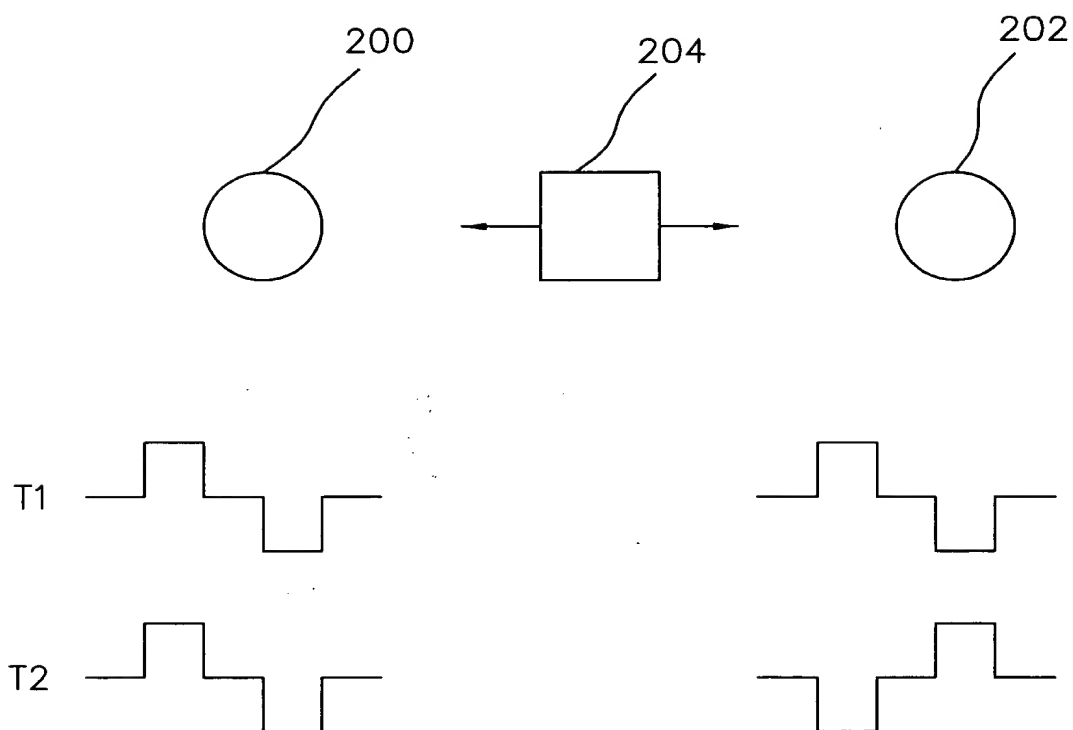


FIG. 11

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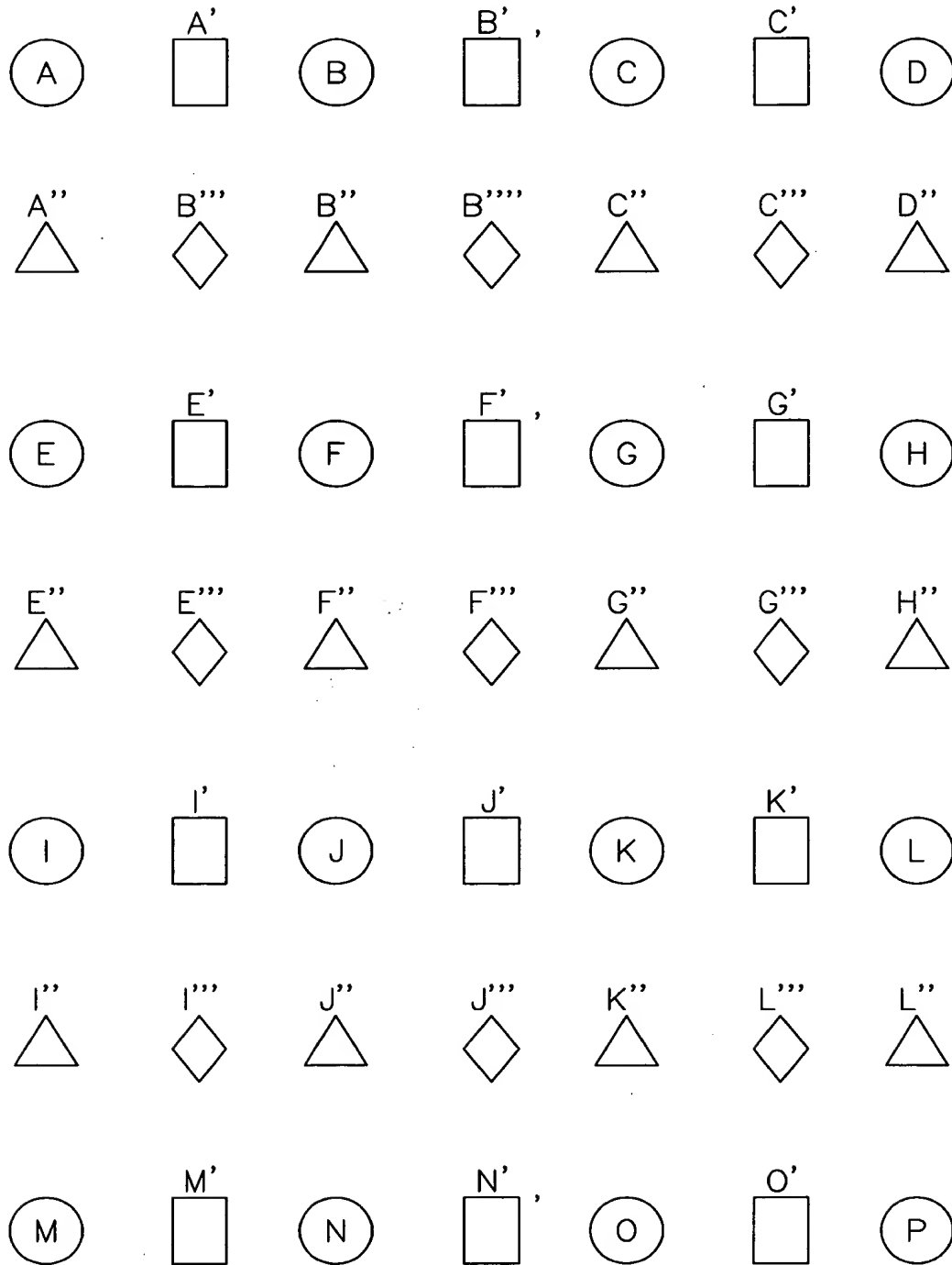


FIG. 12

T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12
A	A/B=A'		A/E=A''								
B		B/C=B'	B/F=B''		B/E=B'''					B/G=B''''	
C	C/D=C'		C/G=C''			C/H=C'''					
D			D/H=D''								
E	E/F=E'			E/I=E''			E/J=E'''				
F		F/G=F'		F/J=F''				F/K=F'''			
G	G/H=G'			G/K=G''					G/L=G'''		
H				H/L=H''							
I	I/J=I'		I/M=I''			I/N=I'''					
J		J/K=J'	J/N=J''								J/Q=J'''
K	K/L=K'		K/O=K''								
L			L/P=L''		L/O=L'''						
M	M/N=M'										
N				N/O=N'							
O	O/P=O'										
P											

FIG. 13

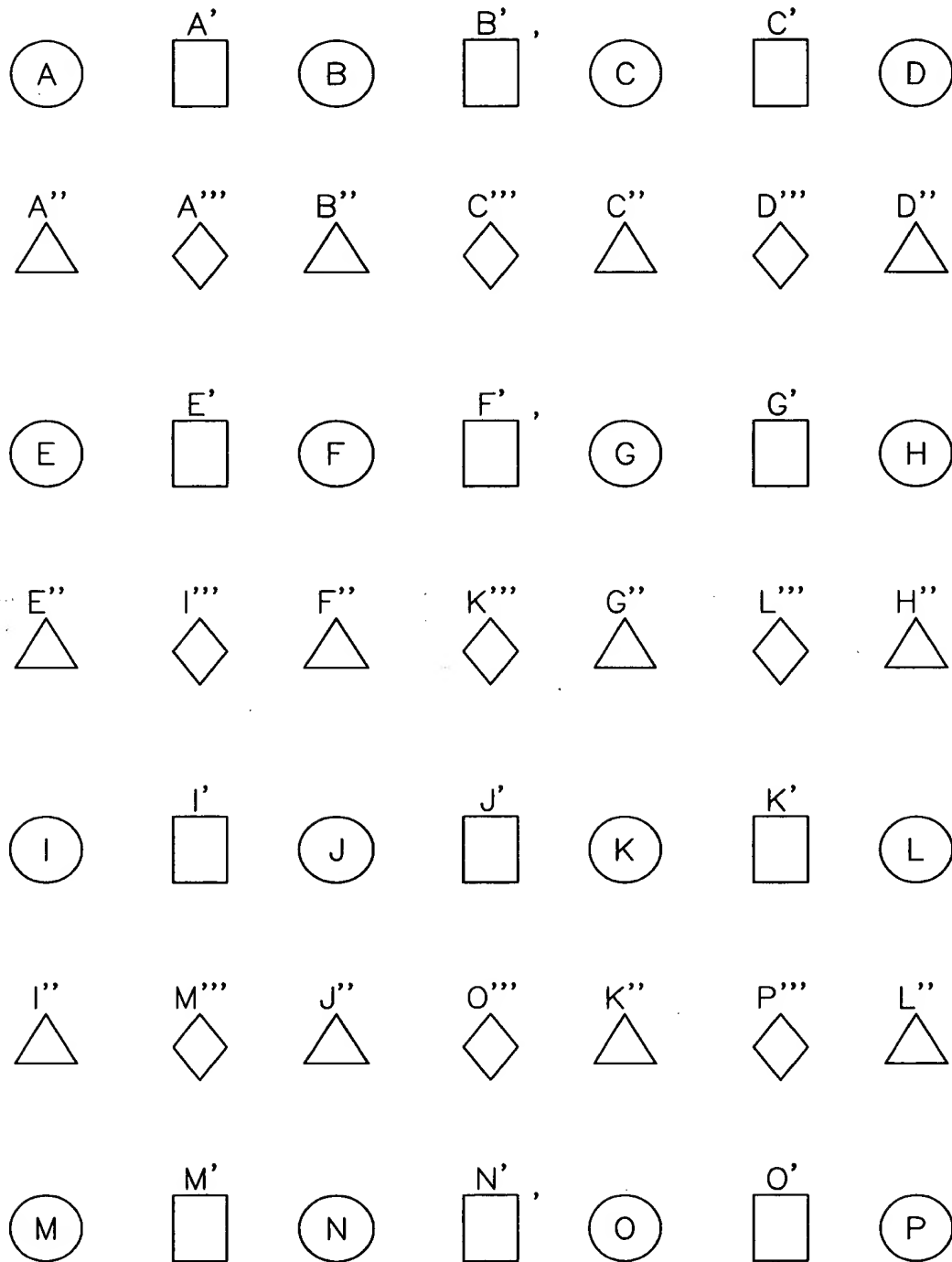


FIG. 14

T1	T2	T3	T4	T5	T6	T7	T8	T9
A	A/B=A'		A/E=A''		A/F=A'''			
B		B/C=B'	B/F=B''					
C	C/D=C'		C/G=C''		C/F=C'''			
D			D/H=D''			D/G=D'''		
E	E/F=E'			E/I=E''				
F		F/G=F'		F/J=F''				
G	G/H=G'			G/K=G''				
H				H/L=H''				
I	I/J=I'		I/M=I''		I/F=I'''			
J		J/K=J'	J/N=J''					
K	K/L=K'		K/O=K''		K/F=K'''			
L			L/P=L''			L/G=L'''		
M	M/N=M'						M/J=M'''	
N		N/O=N''						
O	O/P=O'						O/J=O'''	
P								P/K=P'''

FIG. 15